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EXAMINER				
VARNUM, RYAN A				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/577,007

**Applicant(s)**

ROLION ET AL.

**Examiner**

RYAN A. VARNUM

**Art Unit**

3751

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

### DETAILED ACTION

1. This office action is responsive to the amendment filed on 8/28/2009. As directed by the amendment: claims 16, 31 and 32 have been amended. Thus, claims 16-32 are presently pending in this application.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

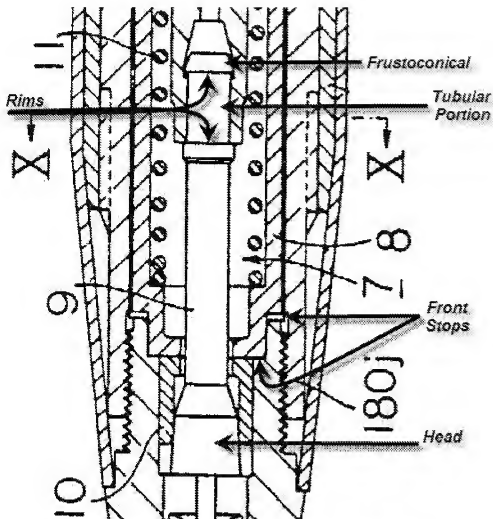
3. Claims 16-22, 24 and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama (US Patent 5,022,772) in view of Leistenschneider (US Patent 2,049,965).

4. In re Claim 16, Kageyama discloses a mechanical pencil comprising a tubular body 1 ("outer cylinder"; Fig. 9A; Column 9, Lines 65-66) extending along a longitudinal axis (See Fig. 9A) between a rear end ("rearward outer cylinder"; Fig. 9A; Column 9, Line 67) and a front end 1a ("forward outer cylinder"; Fig. 9A; Column 9, Line 66) provided with an orifice (Column 14, Lines 40-42), through which a lead 'S' (Fig. 9A) is capable of emerging (Column 14, Lines 40-42), and a lead-advancing mechanism arranged in the tubular body, said advancing mechanism comprises: a longitudinally

movable member 110 ("cassette adapter"; Fig. 9A; Column 10, Lines 13-15) having a forwardly oriented bearing surface ("forward end"; Fig. 9A; Column 10, Lines 25-28) and having a reservoir prolonged by a central duct (See Fig. 9A) allowing the passage of the leads one by one (Column 13, Lines 11-31); a chuck 9 (Fig. 9A; Column 10, Line 4) having a tubular portion connected to said movable member, in order to allow the passage of a lead from the central duct toward a head (See Annotated Partial Fig. 9A below) of said chuck, wherein said chuck is capable of being clamped on the lead (See Annotated Partial Fig. 9A below; Claim 1c); a clamping ring 10 ("chuck tightening ring"; Fig. 9A; Column 10, Line 19) which is movable longitudinally with respect to said chuck and to the tubular body and which is designed to cooperate with the head of said chuck (Column 15, Lines 16-21; Claim 1e); and an elastic element 11 ("resilient body"; Fig. 9A; Column 10, Line 25) having a front end and a rear end, wherein the rear end bears against the bearing surface of said movable member (Column 10, Lines 25-28; fig. 9A), said elastic element being designed to be a single element (See Fig. 9A, See Response to Arguments section below) which biases said clamping ring against the head of said chuck when said advancing mechanism is in a rest position (Claim 1h), a bush 8 ("sleeve"; Fig. 9A; Column 10, Line 20), movable longitudinally with respect to said chuck and the body (Column 10, Lines 20-23), arranged between said clamping ring and the front end of said elastic element (Fig. 9A; Column 10, Lines 20-28), wherein the body has a front stop (See Annotated Partial Fig. 9A below) designed to limit the forward displacement of the bush.

5. Although Kageyama does not disclose the chuck being movable longitudinally with respect to said movable member over a defined stroke, attention is directed to Leistenschneider which teaches a mechanical pencil comprising: a longitudinally moving member 27 ("magazine"; Fig.'s 1-2; Column 4, Lines 18-19 and 1-3) comprising a forwardly oriented bearing surface (Column 3, Lines 64-68), and a chuck 0/9 ("clamping sleeve" and "lead tube"; Fig.'s 1-2; Column 3, Lines 46-48) having a tubular portion 32/33 ("annular flanges"; Fig.'s 1-2; Column 4, Line 24) connected to said moveable member (Fig.'s 1-2), wherein said chuck is movable longitudinally with respect to said movable member over a defined stroke (Column 4, Lines 18-46), for the purpose of preventing the likelihood of lead becoming jammed in the mechanism (Column 4, Lines 18-23).

6. Accordingly, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to modify the device of Kageyama, by removing the "opening or closing mechanism 70" (Fig. 9A; Column 13, Lines 11-31) and providing in its place an extended tube portion connected to the "tubular portion" (See Annotated Partial Fig. 9A below), which extends up to the reservoir defined by lead pipe 18 (See Fig.'s 9A-B), such that the chuck is movable longitudinally with respect to said movable member over a defined stroke, as taught by Leistenschneider, for the purpose of preventing the likelihood of lead becoming jammed in the mechanism.



**Annotated Partial Fig. 9A**

7. In re Claims 17 and 31, as discussed above in regard to Claim 1, the combination of Kageyama/Leistenschneider discloses all the claimed features, and Kageyama further discloses the front stop (See Annotated Partial Fig. 9A above) is formed by a radially inner rim which cooperates with a peripheral portion of the front end of the bush 8 (See Fig.'s 9A and 14; it being understood that the front stops being

formed on the upper surfaces of 180, must be radial given the radial nature of 180 depicted in Fig. 14).

8. In re Claims 18 and 30 and 32, as discussed above in regard to Claim 1, the combination of Kageyama/Leistenschneider discloses all the claimed features, and Kageyama further discloses said elastic element 11 (Fig. 9A) is a helical compression spring (Column 5, Line 42). Kageyama does not disclose said elastic element is designed to exert on the bush a pressure of about 2 - 5 newtons when said advancing mechanism is in the rest position, and a pressure of about 5 - 10 newtons when said chuck has executed a rearward displacement substantially equal to the defined stroke.

13. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an elastic element with the claimed compression forces, for the purpose of providing a mechanical pencil with the desired pressure tolerances, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

9. In re Claim 19, Leistenschneider further discloses the tubular portion 32/33 (Fig. 2) of said chuck 0/9 (Fig.'s 1-2) has, from its rear end, first and second radially outer rims ("annular flanges"; Fig. 2; Column 4, Line 24), and wherein the front end of said movable member has an orifice (See Fig. 2), through which said chuck slides between the first and second rims, the said first and second rims being spaced apart longitudinally in order to limit this sliding of said chuck to a value equal to the defined stroke (Column 4, Lines 18-46).

10. In re Claim 20, Kageyama further discloses the tubular portion (See Annotated Fig. 9A above) of said chuck 9 (Fig. 9A) has a frustoconical portion (See Annotated Partial Fig. 9A above) extending from the first rim as far as the rear end of said chuck.

11. In re Claims 21-22, Kageyama further discloses the body 1 (Fig.'s 9A-B) has a rear stop 202d (Fig. 2) designed to cooperate with a complementary stop ("rear end"; Fig. 9B; Column 11, Line 3) of said movable member 110 (Fig.'s 9A-B) and to limit the rearward displacement of said movable member, the longitudinal distance between the front stop of the body and the rear stop being designed so that said clamping ring keeps said chuck clamped under the action of the bush when said advancing mechanism is in the rest position (Column 11, Lines 2-9).

12. Although Kageyama does not disclose the rear stop is formed by a radially inner rim of the body, the rim cooperating with a radially outer shoulder of said movable member., it is the Examiner's opinion that at the time of the invention it would have been an obvious matter of design choice to a person of ordinary skill in the art to form the rear stop and complimentary stop in the configuration of a radially inner rim and a radially outer shoulder respectively, for the purpose of constructing cooperating stopping surfaces, since applicant has not disclosed that having specifically radial configurations provides any advantage, solves any stated problem, or is used for any particular purpose, and it appears that the device would perform equally well with either design.

13. Since the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to the particular arrangement, or provide any teaching of criticality as to the specific limitation of the radial configurations, this



particular arrangement is deemed to have been known by those skilled in the art, at the time the invention was made, as a mere design consideration. In re Kuhle, 526 F.2d 553,555,188 USPQ 7, 9 (CCPA 1975).

14. Accordingly, it would have been prima facie obvious to modify the device of Kageyama, such that the rear stop is formed by a radially inner rim of the body, the rim cooperating with a radially outer shoulder of said movable member, as such modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of Kageyama.

15. In re Claim 24, Leistenschneider further discloses at least one elastically deformable compensation member 5 ("spring"; Fig. 1; Column 2, Line 37) is arranged between a front stop (See Annotated Partial Fig. 1 below) of the body 21 (Fig. 1) and a bush ("cylindrical tubular portion"; Fig. 1; Column 2, Lines 30-37; it being understood that the 'cylindrical tubular portion' of the clamping ring is an equivalent structure of a bush).

16. In re Claims 26-28, Leistenschneider further discloses the body 21 (Fig. 1) has a rearward movement stop 7 ("block"; Fig. 1; Column 2, Line 42) designed to limit the rearward displacement of said clamping ring 4 (Fig. 1 ; Column 2, Lines 30-32) from the rest position of said advancing mechanism to a value at most equal to the defined stroke of a chuck 0/9 (Fig. 1; Column 3, Lines 46-48); wherein the rearward movement stop 7 (Fig. 1) is formed by at least one stud integral with the body (Column 2, Lines 42-45) and extending inwards between the bush ("cylindrical tubular portion"; Fig. 1; Column 2, Lines 30-37) and said movable member 27 (Fig. 1), the stud being designed

to limit the rearward displacement of the bush; and wherein the rearward movement stop is formed by an inner rim 7 (Fig. 1) of the body 21 (Fig. 1), the rim being designed to cooperate with a radially outer shoulder 6 ("cylindrical tubular portion" and "flange"; Fig. 1 ; Column 2, Lines 34-37) of said clamping ring 4 (Fig. 1).

17. Although Leistenschneider does not explicitly disclose that the rearward movement stop is formed by a radially inner rim, which extends radially inward, it is the Examiner's opinion that it would have been an obvious matter at the time to construct the rearward movement stop in the form of a radially inner rim, extending radially inward. This is especially true in this instance where Leistenschneider discloses that the mating outer shoulder 6 (Fig. 1) is in the form of a radially protruding surface (Column 2, Lines 34-37).

18. In re Claim 29, Kageyama further discloses the chuck 9 (Fig. 9A) is capable of driving the lead 'S' (Fig. 9A) forwards over a defined stroke from the rest position of said advancing mechanism (Abstract).

19. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama in view of Leistenschneider, further in view of Sharrow (US Patent 2,055,316). The combination of Kageyama/Leistenschneider, discloses all the claimed features, except for the body has an aperture extending longitudinally as far as a rear end, and wherein said movable member has a pin projecting into the aperture, the rear end of the aperture forming the rear stop. However, attention is directed to Sharrow which teaches a mechanical pencil wherein the body 9 (Fig. 1) has an aperture 15 (Fig.

1) extending longitudinally as far as a rear end, and wherein a movable member 12 ("disc"; Fig. 2; Column 1, Line 46) has a pin 14 ("stud"; Fig. 2; Column 1, Line 47) projecting into the aperture, the rear end of the aperture forming a rear stop, for the purpose of providing a means whereby a user may observe and adjust the spring tension of the mechanical pencil (Column 3, Lines 23-29).

20. Accordingly, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to modify the device of Kageyama, such that the body has an aperture extending longitudinally as far as a rear end, and wherein said movable member has a pin projecting into the aperture, the rear end of the aperture forming the rear stop, for the purpose of providing a means whereby a user may observe and adjust the spring tension of the mechanical pencil.

21. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama in view of Leistenschneider, as discussed in regard to Claim 24 above, further in view of Schwartzman (US Patent 3,379,490). The combination of Kageyama/Leistenschneider discloses all the claimed features, except for the compensation member comprises at least one tab elastically deformable in a longitudinal direction and produced in one piece with the body. However, attention is directed to Schwartzman which teaches an applicator device comprising an applicator tip 26 ("tapering shoulder"; Fig. 1; Column 2, Line 39) and a compensation member 28 ("helical spring"; Fig. 1; Column 2, Line 43), wherein the compensation member comprises at least one tab ("helical coils"; Column 2, Line 40) elastically deformable in a

longitudinal direction and produced in one piece with the body (Column 2, Lines 36-56), for the purpose of simplifying construction of the device and decreasing manufacturing costs (Column 1, Lines 55-57).

22. Accordingly, it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to modify the device of Kageyama, such that the compensation member comprises at least one tab elastically deformable in a longitudinal direction and produced in one piece with the body by replacing the individual tip 3 and compensation member 11 (Fig. 1) with a single integrated tip and compensation member, as taught by Schwartzman, for the purpose of simplifying construction of the device and decreasing manufacturing costs.

### ***Response to Arguments***

23. Applicant's arguments filed on 8/28/2009 have been fully considered but they are not persuasive.

24. Applicant has argued that the Examiner has stated on the record that the relative movement of the chuck structure in Leistenschneider "does not provide a cushion function, but is for the propose [sic] of preventing a lead jam at the exit of the lead reservoir"; and further that Leistenschneider in fact does not disclose a cushioning function, and that no rearward movement upon an excessive pressure on the lead is possible due to the fact that the bush is a stationary member securely fixed in the pencil

case, thereby preventing the clamping member from moving rearward (See Applicant's Arguments/Remarks filed 8/28/2009). The Examiner respectfully disagrees.

25. The Examiner has made no statement on the record concerning the presence of a "cushioning function" in relation to the chuck structure of Leistenschneider. The Examiner has merely stated that a rationale for modifying the reference of Kageyama in view of Leistenschneider may be found in the desire to providing a structure which prevents lead jams. (See Office Action dated 4/28/2009, Paragraphs 9-10). Furthermore, as Applicant's claims do not currently recite either of the limitations of "a cushioning function" or "an excessive pressure on the lead", it is the Examiner's opinion that no further discussion of these features is warranted at this time.

26. The Applicant has further argued that a person having ordinary skill in the art would not have considered the reference of Leistenschneider for the purpose of improving and simplifying the cushioning function of Kageyama. However, this argument is moot as the Examiner has argued that the motivation for modifying Kageyama in view of Leistenschneider is for the purpose of providing a structure capable of preventing the pieces of lead from becoming jammed in the device; and not for improving or modifying the cushioning function.

27. The Applicant has also argued that the modification of Kageyama in view of Leistenschneider would have no effect on the lead becoming jammed at the other end of the duct. The Examiner has addressed this argument in the citation of the prior art above (See the discussion regarding Claim 1 above). Specifically, the Examiner has further described how Kageyama would be so modified by Leistenschneider in order to

effect the desired result. Specifically, the "opening or closing mechanism 70" (Fig. 9A; Column 13, Lines 11-31) would be removed, in favor of substituting a length of piping extending from the "tubular portion" (See Annotated Partial Fig. 9A above) which would extend along the central duct and into the lead piece retaining section. Such modification would require only the duplication of the similar structure as disclosed in Leistenschneider and depicted in Fig. 1 as the portion of lead tube 9 extending upwardly from annular flange 32. It is the Examiner's opinion that this modification is made only more obvious by the fact the "opening or closing mechanism 70", which such modification would replace, is itself a structure which functions to prevent lead jamming (i.e. – "one lead can be moved through the groove"; Column 13, Lines 25-31).

28. Applicant has also argued that both Kageyama and Leistenschneider disclose devices which comprise multiple elastic members while Applicant's device comprises only a single elastic element. The Examiner concedes that the cited references do each contain more than a single elastic element. However, Applicant's claim language, as currently recited, does not require that the device consists of only a single elastic element. Applicant's current claimed language requires "an elastic element...said elastic element being designed to be a single element which biases said clamping ring...". While the Examiner's references do contain more than a single elastic element, the Examiner maintains that the specific elastic element cited in rejecting the relevant limitation is in fact "an elastic element" which is "designed to be a single element" to the extent that the spring 11 is a single spring which functions as required by the claim language. If Applicant wishes to limit the scope of the claim language such that the

device consists of only a single elastic element, then the claim language must be amended to more properly reflect such a limitation.

### ***Conclusion***

29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN A. VARNUM whose telephone number is (571) 270-7853. The examiner can normally be reached on Monday - Friday, 9:00 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. A. V./  
Examiner, Art Unit 3751

/Huyen Le/  
Primary Examiner, Art Unit 3751